



Oil Industry Segment Update

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**Rail Energy Transportation Advisory Committee
Surface Transportation Board**

September 22, 2016

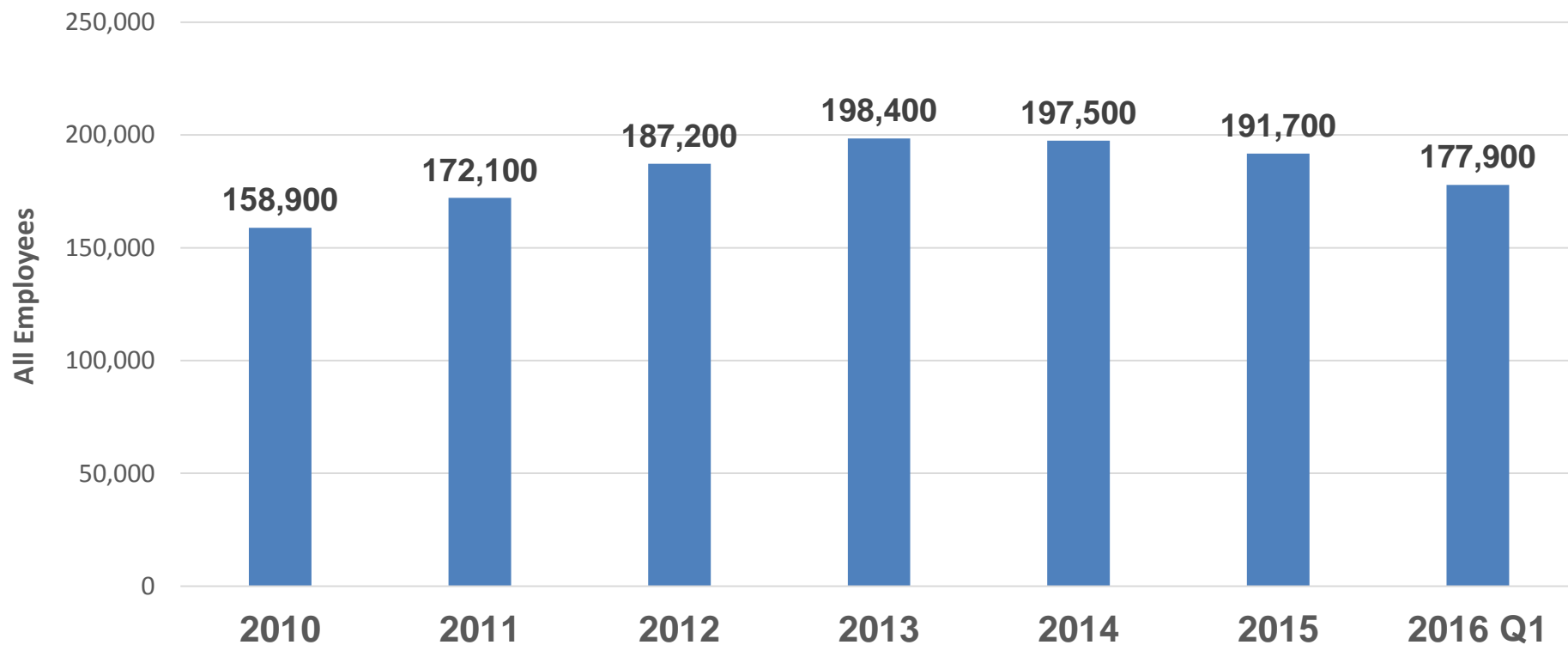
US Crude Oil Environment

- **Crude oil supplies remain at historic highs** [Source: Wall Street Journal]
- **Global production exceeding exploration** [Source: Wall Street Journal]
- **Prices remain low and volatile**
 - **Cushing WTI Spot** [Source: EIA Weekly Report]
 - April 4, 2014 = \$101.46
 - April 3, 2015 = \$48.91
 - April 6, 2016 = \$36.82
 - September 9, 2016 = \$45.88
- **US Land rig count down 74% from 2014 peak** [Source: Baker Hughes]
- **US production declined (6.6%) from 6/'15 to 6/'16** [Source: EIA]
- **Saudi Arabia has overtaken U.S. as number one producer for first time since 2014** [Source: EIA]
- **Current economics favor pipe over rail** [Source: RBN Energy]
- **CBR volumes have declined below 2012 pace** [Source: RBN Energy]

Land Oil Rig Count

Region	2014 Peak (October)	September 2015	September 2016	'15/'16 Change	Peak to Present Change
US	1,551	629	397	-232	-74%
Eagleford	202	78	33	-45	-84%
Permian	560	249	202	-47	-64%
Williston	194	72	28	-44	-86%

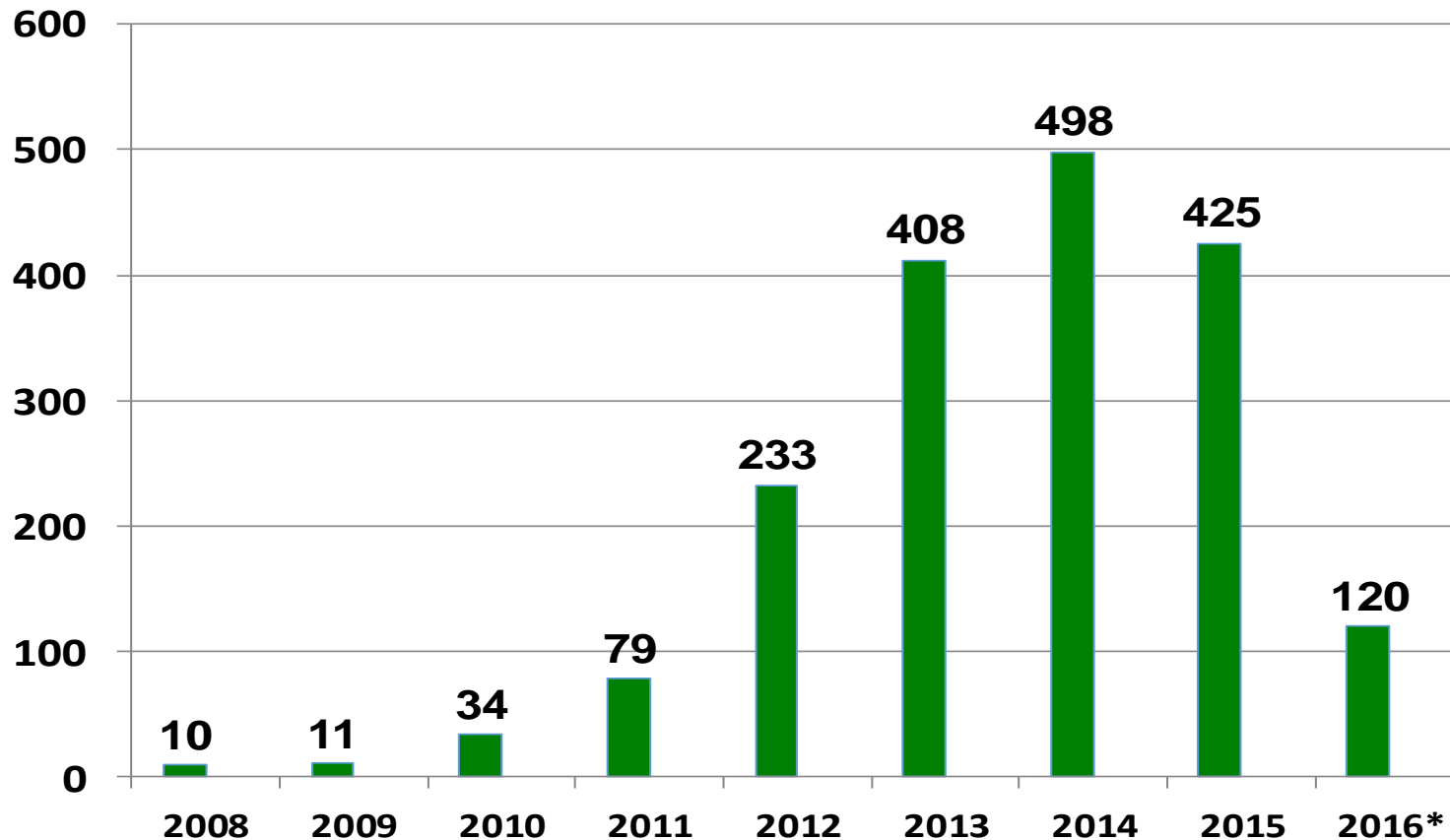
Oil and Gas Average Annual Employment (Seasonally Adjusted)



Source: U.S. Bureau of Labor Statistics

Volume of Crude by Rail Carloads

Originated Carloads on US Class I Railroads (1,000's)



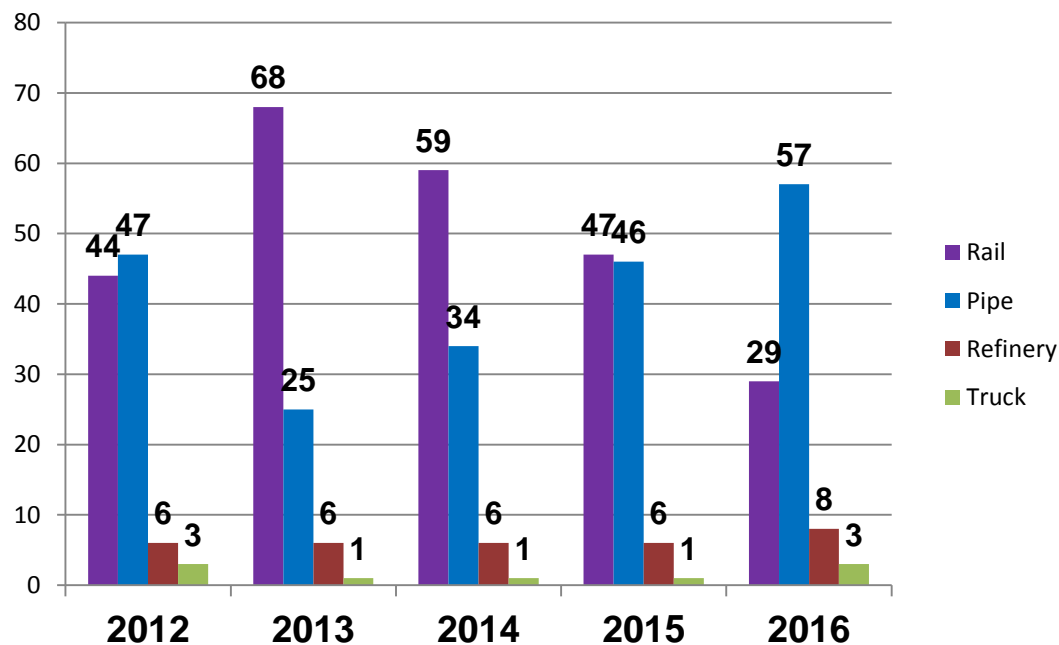
Note: AAR estimates that nearly 63,000 tank cars formerly in Class III flammables liquid service were stored at the end of Q2 2016.

* Q1 & Q2

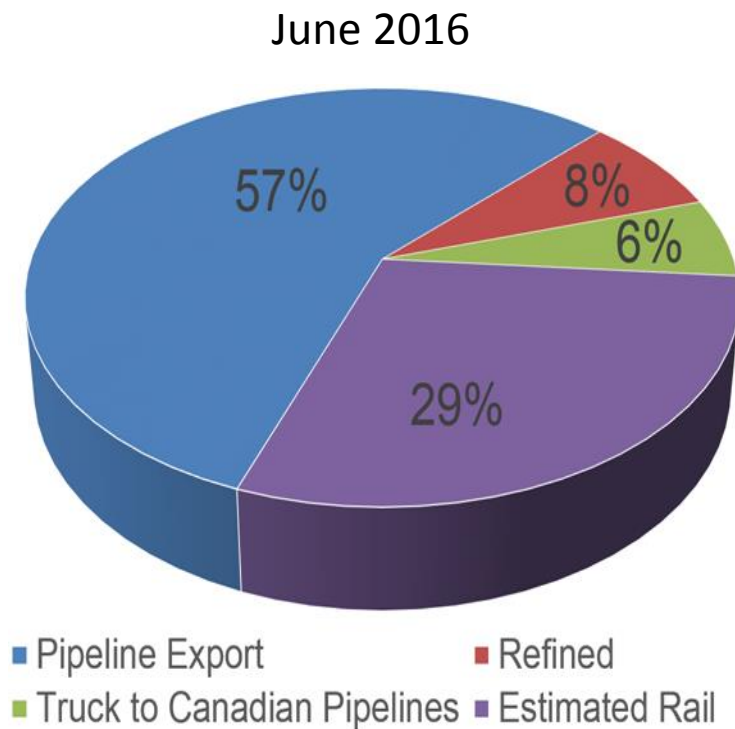
Source : AAR
08/31/2016

Source: 2008 - 2015 AAR Train 2/ 2016 Railway Age citing AAR

Williston Basin Crude Oil Share

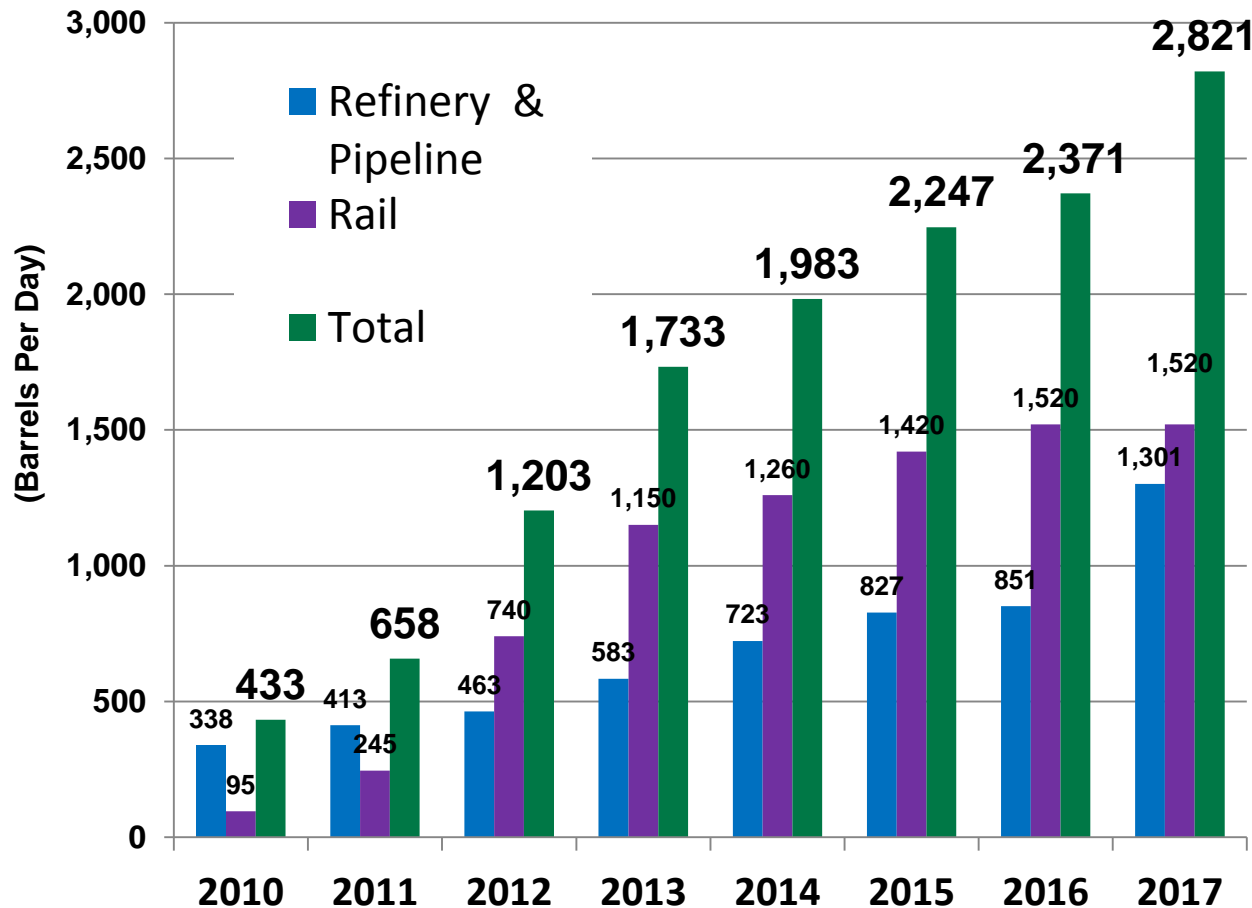


	Average Production/BOPD	Rail/BOPD est.
6/2012	733,600	322,800
6/2013	973,500	662,000
6/2014	1,167,100	688,600
6/2015	1,245,700	585,500
6/2016	1,026,584	297,709



Williston Basin Crude Oil Export Options

(Reported Capacity – Not Market Share)



Rail: Loading terminal capacity/not railroad

Based on NDPA production and modal market share estimates for June:

- **29% rail market share indicates that approximately 80% of loading terminal capacity is idle**
- **57% pipeline market share indicates that approximately 31% of pipeline capacity is idle**

Closing Thoughts

- **Oil producers continue their response to market realities by focusing on efficiency and cost reduction**
- **National production of crude oil has declined**
- **Oil shippers continue the pursuit of zero defects in the safe and compliant shipping of crude oil by rail**
- **Surplus railroad, origin/destination terminal, and tank car fleet capacity exists based upon current CBR volumes**
- **API attempted a crude-by-rail unit train cycle time survey, but insufficient responses were received to provide statistically significant results – effort continues**